

ABSTRACT

The present invention relates to a process for improving the recovery of valuable sulphide minerals. The process involves determining an Eh range within which the valuable sulphide mineral may be recovered by flotation without the need of a collector. The slurry is then subjected to flotation in a pneumatic cell (50) at such a speed that the slurry remains within the Eh range during flotation. The process substantially reduces or totally eliminates the need for collector. For mixed ores such as chalcopyrite/chalcocite chalcopyrite is recovered without collector, while some non xanthate collector may be required to recover chalcocite.

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